

ABSTRACT

A method of modeling a three-dimensional object using voxels. The voxels can be subdivided in a variety of methods and marching tetrahedra may also be used to generate the model. Once a voxel has been subdivided, the continuity of the model may be preserved by subdividing only the voxels immediately adjacent to the subdivided voxel. Also, a user interface that enables and facilitates the use of the three-dimensional modeling method.